



COPY OF PAPERS  
ORIGINALLY FILED

6/10/1619

Please type a plus sign (+) inside this box →

BT0/SP27N(08-00)  
Approved for use through 10/31/02 OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number Of Pages In This Submission	5	Attorney Docket No.	532512000312
--	---	---------------------	--------------

TELE FAX REC'D  
8/19/2002  
1800/2000

### ENCLOSURES (check all that apply)

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Fee Transmittal Form                              | <input type="checkbox"/> Assignment Papers  | <input type="checkbox"/> After Allowance Communication to Group                            |
| <input type="checkbox"/> Fee Attached                                      | <input type="checkbox"/> Drawing(s)   | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences        |
| <input type="checkbox"/> Amendment / Reply                                 | <input type="checkbox"/> Licensing-related Papers                                       | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final                                       | <input type="checkbox"/> Petition   | <input type="checkbox"/> Proprietary Information   |
| <input type="checkbox"/> Affidavits/declarations                           | <input type="checkbox"/> Petition to Convert to a Provisional Application               | <input type="checkbox"/> Status Letter   |
| <input type="checkbox"/> Extension of Time Request                         | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):            |
| <input type="checkbox"/> Express Abandonment Request                       | <input type="checkbox"/> Terminal Disclaimer  | <input checked="" type="checkbox"/> Preliminary Amendment B (4 pages)                      |
| <input type="checkbox"/> Information Disclosure Statement                  | <input type="checkbox"/> Request for Refund   | <input checked="" type="checkbox"/> Return Postcard  |
| <input type="checkbox"/> Certified Copy of Priority Document(s)            | <input type="checkbox"/> CD, Number of CD(s) _____                                      |  |
| <input type="checkbox"/> Response to Missing Parts/ Incomplete Application |   |  |
| <input type="checkbox"/> Response to Missing Parts under 35 U.S.C. 371     |   |  |

Remarks

### SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Firm or Individual Name	Kate H. Murashige, Registration No. 29,959 3811 Valley Centre Drive, Suite 500 San Diego, CA 92130 Morrison & Foerster LLP
Signature	
Date	August 19, 2002

### CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on August 19, 2002.

Ruth Saskowski

Burden Hours Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

sd-105992

COPY OF PAPERS  
ORIGINALLY FILED

PATENT

Docket No. 532514000312

Serial No. 10/036,317

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C., 20231, on August 19, 2002.

Ruth Saskowski

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Gregory M. LANZA , et al.

Serial No.: 10/036,317

Filing Date: December 28, 2001

For: SITE SPECIFIC BINDING SYSTEM,  
IMAGING COMPOSITIONS AND  
METHODS

Examiner: To be assigned

Group Art Unit: 1619

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

This amendment supercedes a preliminary amendment A filed along with the application herein. In preliminary amendment A, claim 4 was canceled and claims 11-19 were added.

## AMENDMENT

Please cancel claims 1-3 and 5-19 and substitute the following claims:

20. (New) A method for enhanced magnetic resonance imaging of a target tissue in a subject *in vivo* which method comprises

detecting a magnetic resonance image of said target tissue wherein said target tissue is bound to a ligand specific for said target tissue and wherein said ligand is directly coupled to lipid-coated liquid perfluorocarbon particles contained in an emulsion,

which method further comprises, prior to said detecting, administering said emulsion to said subject.

21. (New) The method of claim 20, wherein said lipid-coated liquid perfluorocarbon particles further comprise at least one chemotherapeutic agent or gene therapy delivery system.

22. (New) The method of claim 20, wherein said ligand comprises an antibody or fragment thereof, a virus, a receptor agonist or antagonist, a hormone, or a nucleic acid.

23. (New) The method of claim 22, wherein the ligand is an antibody or fragment thereof.

24. (New) A method for enhanced magnetic resonance imaging of a target tissue in a subject *in vivo* which method comprises administering to said subject an emulsion comprising a ligand specific for said target tissue, said ligand directly coupled to lipid-coated liquid perfluorocarbon particles, and

detecting a magnetic resonance image of said target tissue wherein said target tissue is bound to said ligand and wherein said ligand is directly coupled to lipid-coated liquid perfluorocarbon particles contained in said emulsion.

25. (New) The method of claim 24, wherein said lipid-coated liquid perfluorocarbon particles further comprise at least one chemotherapeutic agent or gene therapy delivery system.

26. (New) The method of claim 24, wherein said ligand comprises an antibody or fragment thereof, a virus, a receptor agonist or antagonist, a hormone, or a nucleic acid.

27. (New) The method of claim 26, wherein the ligand is an antibody or fragment thereof.

28. (New) A method for magnetic resonance ultrasound imaging of a target tissue in a subject *in vivo* which method comprises

B / detecting a magnetic resonance image of said target tissue wherein said target tissue is bound to a ligand specific for said target tissue and wherein said ligand is directly coupled to lipid-coated liquid perfluorocarbon particles contained in an emulsion,

wherein said subject has been administered said emulsion prior to said detecting.

29. (New) The method of claim 28, wherein said lipid-coated liquid perfluorocarbon particles further comprise at least one chemotherapeutic agent or gene therapy delivery system.

30. (New) The method of claim 28, wherein said ligand comprises an antibody or fragment thereof, a virus, a receptor agonist or antagonist, a hormone, or a nucleic acid.

31. (New) The method of claim 30, wherein the ligand is an antibody or fragment thereof.